REMARK

The Office Action of November 12, 2009 has been reviewed and carefully considered by the applicants.

Interview Summary

The applicants thank the Examiner for his time in conducting a telephonic interview with the applicants' undersigned representative on January 25, 2010. In that telephonic interview, the Examiner agreed to withdraw the finality of the present Office Action. The applicants therefore present this amendment in response to a non-final Office Action.

Claim Status

In the present amendment, claims 6-8, 12, 72, and 74 are herein amended. These amendments are made to address the rejections made by the Examiner under 35 USC §§101 and 112, and are not herein presented to distinguish over the references cited by the Examiner.

The application is currently presented with claims 1-3, 5-14, 16, 17, 28, 60, 69, and 71-84.

Claim Rejections under 35 USC §101

Claims 6-8, 72-75, and 81-84 have been rejected under 35 USC §101 as being directed to non-statutory subject matter.

Claims 6-8 have been amended to positively recite the structure and function performed by those structures in the claimed patient physiological monitoring assembly. Therefore, claims 6-8 are believed to be directed to statutory subject matter. The Examiner is reminded that "a question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to - process, machine, manufacture, or composition of matter - [provided the subject matter falls into *at least one category* of statutory subject matter] but rather on the essential characteristics of the said subject matter, in particular, its practical utility. MPEP 2106IV(b).

Claim 72 has been amended to now recite that that logic operates on a controller. This acknowledges the Examiner's statement that "logic" is software or algorithms that must be performed on an apparatus. The claimed logic is now performed on the apparatus of a controller.

Therefore, claim 72 is now believed to be directed to statutory subject matter. Claims 73 and 81-83 all depend directly and/or indirectly from independent claim 72, and therefore these claims are also believed to be directed to statutory subject matter.

The applicants would like to point out that independent claims 72 and 74 and dependent claims 73, 75, and 81-83, which depend directly and/or indirectly from one of these two independent claims, recite methods that include the structure of a controller that operates a logic that performs the method steps. The applicants submit that this structure is sufficient to meet the requirements of 35 USC §101 and is in the spirit of the Examiner's recommendation to positively claim a structure performing the process. The applicants submit that the controller and suggested processor are similar structures, and that the applicants' decision to define the claim in terms of a controller is merely based upon the use of that term in the specification of the present application.

Therefore, claims 6-8, 72-75, and 81-84 are all believed to be directed to statutory subject matter.

Claim Rejections under 35 USC §112

Claim 74 has been rejected under 35 USC §112 for indefiniteness and failing to comply with the written description requirement. Claim 74 is currently amended to remote any references to "a geographically defused manner." Therefore, claims 74 and 75 are believed to be definite and comply with the written description requirement.

Claim Rejections under 35 USC §102

Nunome US 6,497,657

Independent claims 1, 11, 72, 74, and 76 have been rejected under 35 USC §102(e) as being anticipated by Nunome US Patent No. 6,497,657 (hereinafter "Nunome").

The claims of the current application are directed to systems and methods that generate a first diagnostic interpretation and a second diagnostic interpretation. Thus, the claimed systems and methods provide an automated generation of a "differential diagnosis" that is presented to a clinician. The clinician is free to use the generated first diagnostic interpretation and the second diagnostic interpretation in any way that the clinician sees fit as the presently claimed systems and methods are directed to the creation of this first diagnostic interpretation and second diagnostic interpretation. The claimed systems and methods apply a first logical rule set to physiological data to produce a first diagnostic interpretation and apply a second logical rule set to the same physiological data to generate the second diagnostic interpretation.

The Examiner has cited the disclosure of Nunome, in particular the disclosures of Nunome found at column 5 and column 7, as anticipating the claimed systems and methods.

Nunome discloses a remote diagnosis system that measures physical information from the patient and uses this information in a preliminary-diagnosis means to automatically judge whether the physical information falls within a reference range. This judgment is used to determine if the information is normal or if the physical information requires italics a proper diagnosis made by a doctor. (Column 7, lines 35-41) (emphasis added). Thus, the preliminary diagnosis performed by the preliminary-diagnosis means is merely a determination of whether or not the physical information warrants diagnosis from a doctor. This is not a diagnostic interpretation in fact, but rather is a prompt to provide physical information to a doctor for review. If the preliminary diagnosis means 62 determines that a diagnosis is to be made by a doctor, then the physical information is sent to a doctor-side terminal device where "a doctor who is familiar with the patient *makes a proper or final medical diagnosis* based on the information displayed on the display device 18b, and *inputs the proper diagnosis* and one or more medical advices to the patient, through the keyboard 18a." (emphasis added) (Column 8, lines 37-41).

The Examiner specifically relies up the preliminary diagnosis means at column 7, lines 35-61 as the first logic rule set and the doctor-side terminal devices at column 7, lines 46-61 as the second logic rule set and notes that the patient-side terminal device processes collected data and generates a first diagnosis while it receives and displays a second diagnosis from the doctor-side

terminal. However, as it has been shown above, the "proper diagnosis" provided by the doctor-side terminal device is one that is "made by the doctor and input through the keyboard" (column 8, lines 44-45) rather than one that is generated by a controller through the application of a second logic rule set to physiological data. Therefore, the remote diagnosis system disclosed by Nunome does not create a differential diagnosis by generating a first diagnostic interpretation and a second diagnostic interpretation, but rather makes a single determination whether the physical information warrants a doctor diagnosis, presents that physical information to at least one doctor and receives the diagnosis made by the doctor. As Nunome fails to disclose the claimed first logic rule set and second logic rule set that are used to generate a first diagnostic interpretation and a second diagnostic interpretation, the disclosure of Nunome fails to anticipate the claims of the present application.

Claims 2, 3, 5-10, 12, 16, 68, 69, 71, 73, 75, and 77-84 all depend directly and/or indirectly from independent claims 1, 11, 72, 74, or 76. Therefore, these claims too are believed to be allowable for the reasons set forth above.

Yasushi US 6,485,418

The Examiner has rejected claims 1-3, 10-12, 16, 17, 28, and 68 as being anticipated by Yasushi et al US Patent No. 6,485,418 (hereinafter "Yasushi"). Included in the claims rejected by the Examiner is independent claim 1 directed to a patient physiological monitoring assembly and independent claim 11 directed to a method for providing diagnostic aid to a clinician. As highlighted above, claims 1 and 11 both include a first logic rule set that is applied to physiological data to generate a first diagnostic interpretation and a second logic rule set that is applied to physiological data to generate a second diagnostic interpretation.

The Examiner specifically references the disclosure of Yasushi found at column 4, line 20 - column 5, line 18 as anticipating the claimed apparatus and method. Specific to the Examiner's rejection, the Examiner associates the first center device of Yasushi with the first logic rule set and the second center device of Yasushi with the second logic rule set.

Looking to the disclosure of Yasushi, Yasushi discloses a health monitoring system. The system includes a "first center device" which includes a computer connected to a network that is

operated by a nurse and a "second center device" that includes a computer connected to a network that is operated by a doctor. Column 3, lines 8-21. The first center device receives diagnostic data from a portable terminal device and determines if the diagnostic data is abnormal or not. If the diagnostic data is abnormal, the first center device requests additional patient data which is displayed to the operator of the first center device (nurse). "The operator diagnoses the condition of the person P_1 based on the displayed data." (Column 4, lines 44-45) The first center device then judges whether this diagnosis by the operator of the first center device is doubtful or not. If the first center device determines that the diagnosis by the nurse is doubtful, then the patient data is transmitted to the second center device which displays the detailed data on the monitor. "The operator of the second center device is an expert who is more medically qualified than the operator of the first center device. *The operator of the center device diagnoses the condition of the person P_1 in accordance with the data about the person P_1 displayed on the monitor.*" (emphasis added) (Column 5, lines 2-7)

The system disclosed by Yasushi promotes the effective data processing and review for diagnosis by multiple clinical staff. The system of Yasushi prompts a nurse to make a first diagnosis, which is then checked by the system for appropriateness and if this appropriateness is questioned, the patient data is then presented to a doctor for diagnosis. Yasushi, however, does not disclose the claimed assembly and methods that provide a clinician with an automated "differential diagnosis" by creating separate first and second diagnostic interpretations. Therefore, Yasushi fails to anticipate the assembly of independent claim 1 or the method of independent claim 11. Therefore, these independent claims are believed to be allowable over the disclosure of Yasushi. Claims 2, 3, 5-10, 12, 16, 17, 68, 69, 71, and 84 all depend directly and/or indirectly from independent claim 1 or 11. Thus, these dependent claims are also believed to be novel over the disclosure of Yasushi for the reasons stated above, as well as for the subject matter specifically recited in each of these claims.

Conclusion

By the present amendments and arguments, the currently presented claims are believed to meet the statutory requirements of 35 USC §§101 and 112 as well as are novel over the cited references of Nunome and Yasushi. Therefore, the present application is believed to be in a condition for allowance with claims 1-3, 5-14, 16, 17, 28, 68, 69, and 71-84. Such action is earnestly requested

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

Benjamin R. Imhoff
Reg. No. 60,036

Andrus, Sceales, Starke & Sawall, LLP
100 East Wisconsin Avenue, Suite 1100
Milwaukee, Wisconsin 53202
Telephone: (414) 271-7590
Facsimile: (414) 271-5770